WHAT IS CLAIMED IS:

1. A mold assembly for use in a plastic blow molding process, the mold assembly comprising:

a mold cavity shell made by nickel vapour deposition;

the mold cavity shell having a cavity portion including a front face, a rear face and peripheral edge portions, the front face defining a cavity in the shape of a portion of a product to be molded;

the mold cavity shell also having coplanar, peripheral side portions attached to said peripheral edge portions, the side portions defining front surfaces adapted to mate with corresponding surfaces of a mating mold cavity shell to define the product to be molded;

a mold holder located rearwardly of the mold;

means for releasably connecting the mold holder to the peripheral side portions; and

the mold holder defining an inner wall spaced from the mold cavity portion to define a heat transfer passage between said inner wall and said cavity portion.

2. An assembly as claimed in claim 1 wherein the mold holder inner wall is formed with flow enhancement surface irregularities.

3. A mold assembly as claimed in claim 2 wherein the flow enhancement surface irregularities are a series of parallel grooves.

4. A mold assembly as claimed in claim 1 wherein the mold cavity portion rear face is formed with structural enhancement ribs.

5. A mold assembly as claimed in claim 4 wherein the structural enhancement ribs are a series of parallel spaced apart ribs.

6. A mold assembly as claimed in claim 1 wherein the mold holder has peripheral parting line portions located outwardly of the mold cavity shell peripheral side portions.

7. A mold assembly as claimed in claim 6 wherein the mold holder peripheral parting line portions have front faces extending slightly forwardly of the mold cavity shell side portion front surfaces.

8. A mold assembly as claimed in claim 7 wherein the front faces extend forwardly a distance of between 0.002 and 0.003 inches (0.051 and 0.076 millimetres) so that when the mold assembly is mated to a corresponding mating mold assembly, a gap of between 0.004 and 0.006 inches (0.102 and 0.152 millimetres) is present between the mating mold cavity shell side portion front surfaces.

9. A mold assembly as claimed in claim 1 wherein the peripheral side portions have locating registering means and the mold holder has corresponding locating registering means adapted to receive the peripheral side portion locating registering means.

10. A mold assembly as claimed in claim 9 wherein the peripheral side portion locating registering means and the mold holder locating registering means are adapted to receive a threaded fastener.

11. A mold assembly as claimed in claim 1 wherein the peripheral side portions have locating clamping means and the mold holder has corresponding locating clamping means adapted to receive the peripheral side portion locating clamping means.

12. A mold assembly as claimed in claim 11 wherein the peripheral side portion locating clamping means and the mold holder locating clamping means are adapted to receive a threaded fastener.

13. A mold assembly as claimed in claim 1 wherein the mold assembly is a first mold assembly, and further comprising a second like mold assembly adapted to matingly engage the first mold assembly.

14. A mold assembly as claimed in claim 13 wherein the mating first and second mold assemblies define only a portion of the product to be molded, and further

comprising a third mold assembly adapted to mate with the first and second mold assemblies to complete the product to be molded.

15. A mold assembly as claimed in claim 1 wherein the mold holder is formed with heat transfer passages therein.

16. A mold assembly as claimed in claim 1 wherein the mold holder is made of aluminium.